Abstract of the Disclosure

An irradiation treatment device is provided in which uniform irradiation treatment with high speed can be achieved without damaging a substrate, even in the case in which the substrate to be treated is enlarged and exceeds the length of the rod-shaped dielectric barrier discharge lamp. The object is achieved in a substrate treatment device using dielectric barrier discharge lamps in which the dielectric barrier discharge lamps and the substrate are transported relative to one another and in which the surface of this substrate is irradiated with UV light from the dielectric barrier discharge lamps, in that the length for the above described dielectric barrier discharge lamps in the lengthwise direction is less than the length in the direction perpendicular to the transport direction of the substrate. There are at least two dielectric barrier discharge lamps and there is an area of the above described substrate which has been irradiated by one dielectric barrier discharge lamp and there is an area of the above described substrate which has been irradiated by the other dielectric barrier discharge lamp during transport of this substrate such that they come to rest on one another at least in one part, and that with respect to the UV light emitted by the respective dielectric barrier discharge lamp in this area in which superposition occurs, there are light screening means by which a transition is effected between the two lamps.